

ROBERT TRAUB (1916–1996): AN APPRECIATION



Historians are fond of reminding us that the nineteenth century effectively began with Wellington's victory at Waterloo in 1815 and ended with the guns of August 1914. But do they know that the twentieth century also has ended off schedule? At least for medical entomology, the curtain fell on 21 December of last year, when we lost Dr. Robert Traub, Colonel, U.S. Army (Retired), the greatest authority on fleas and flea-borne diseases who ever lived and one of the most influential medical entomologists of this—or any—century. In months ahead, Dr. Traub's panegyrists will be legion, and formal obituaries may be expected in scores of scientific journals and societal newsletters worldwide. This is not one of them. It is, rather, a reminiscence, an anecdotal adieu to both a preeminent intellect and a charming personality.

It has been said that success in life is largely a matter of luck, in which case Robert Traub was lucky from the cradle, for he

was born on 26 October 1916 in the Borough of New York (Manhattan), the cultural center of a city universally renowned for its tolerance and generosity. Unfettered by provincialism and imbued from childhood with a passion for natural history, Traub soon secured what was, for his generation, the Holy Grail of academe: admission to the City College of New York, which, by virtue of being tuition-free, attracted the cream of America's youth throughout the Great Depression. Success at City College in 1938 (B.S. in biology, cum laude) was Traub's entrée to the Ivy League; the following year, Cornell University awarded him an M.S. in his chosen métier of medical entomology. But just three months after the commencement ceremonies, Hitler unleashed 52 divisions against Poland, and entomologists everywhere felt the blow.

Paradoxically, the massive deployment of Allied forces during World War II heralded medical entomology's golden age, particularly in tropical Asia. Dispatched as a young Army officer to the China-Burma-India Theater, Traub's attention soon focused on a mysterious illness initially dubbed "CBI fever" that turned out to be scrub typhus (chigger-borne rickettsiosis, tsutsugamushi disease), an often fatal infection that was feared more than malaria because its etiology was unknown. Working at the United States of America Typhus Commission laboratory in Myitkyina, North Burma, and, after the war, at the U.S. Army Medical Research Unit, on the grounds of the Institute for Medical Research, Kuala Lumpur, Malaya, Robert Traub and his American and British collaborators clarified the intricate ecology of this disease and ultimately defeated it with the potent new antibiotic chloromycetin (chloramphenicol). These epochal advances in typhus research earned Traub's team a nomination for the Nobel Prize in 1948.

Acarologists will always claim Robert Traub as one of their own. Yet, even while he immersed himself in mite studies (publishing over his lifetime 66 papers on chiggers and chigger-borne rickettsiosis, including descriptions of 124 new chigger species), Traub was cultivating his lifelong enthusiasm for what his friend and mentor Karl Jordan (1861–1959) called “those jolly insects”: fleas. Indeed, four new species of North American fleas were the subject of Traub’s first scientific paper, published by the Field Museum in 1944, while its author was away pursuing acarines in the Burmese jungles (fleas will also be Traub’s swan song, in the form of a co-authored chapter in a new textbook of medical and veterinary entomology slated to appear next year). Tellingly, 31 of Traub’s 91 papers on fleas and flea-borne diseases were written in his spare time during a military career (1942–1962) that kept him otherwise occupied.

And what occupations! While with the Army, Traub completed his Ph.D. at the University of Illinois (1947), in the company of his confrere Harry Hoogstraal (1917–1986), whose name will forever be a mantra in medical acarology. After the Army, Traub accepted a professorship in the Department of Microbiology, University of Maryland School of Medicine, Baltimore, subsequently leading or participating in 14 research expeditions on four continents. During both careers, his published contributions, many of book length, on fleas, mites, mosquitoes, leeches, even amebiasis, as well as on a vast range of host and reservoir vertebrates, defined the state of the art in parasitology. And all the while, he was the exemplar of domesticity—proof that professional achievement need not (must not!) eclipse familial devotion.

Science has seldom had a happier exponent than Robert Traub, whose charm was disarming. To this day, throughout the Third World, even the least of his former technicians remember him with unbridled, often tearful affection. Though a military man, tough “three-gun Traub” never

stooped to the language of the gutter; though honored the world over, he never lost the common touch. His humor could leave an audience in stitches, as when he would explain the derivation of the specific epithet *fujigmo* (no, it’s not a Japanese surname!), applied to a new chigger by his sardonic associates Cornelius B. Philip and Henry Shepard Fuller (1950, *Journal of Parasitology* 40: 50–57). One of his favorite recollections was of taking a company of soldiers on an extended field exercise through waist-deep swamps in Southeast Asia. After several days, Traub noticed that the company “ration” of condoms was running low, but his men at least seemed to have overcome their fear of the swamps’ purportedly urethraphilous leeches.

Traub often applied the evocative descriptor “Renaissance man” to the luminaries in his life, among them the peerless medical ecologist J. Ralph Audy (1914–1974) of “Imphal Circus” days (Audy’s *Red Mites and Typhus*, published in 1968 by the Athlone Press, University of London, may well be the most engaging acarological essay ever written) and, of course, Harry Hoogstraal. But it took one to know one. Traub’s interests, like his profession, embraced the world. His erudition was immediately apparent in such spheres as history and classical music, but he was also a connoisseur of fine wines, exotic foods, and East Asian *objets trouvés*, especially those crafted of jade, ivory, or rare woods; of these latter, he amassed invaluable personal collections. Touchingly, he retained a child-like fascination with the films of “Stan” Laurel and Oliver Hardy, the first great comedy team of the “talkies”; a poster of the perennially befuddled “boys” was a fixture in his basement laboratory.

The last decades of Traub’s life were virtual excerpts from the Book of Job. Among his afflictions: pernicious diabetes, recurring cancers and, most painful to recall, the loss in 1989 of his gifted daughter Jeanette—all against the backdrop of the oft-untimely passing of his former comrades-

in-arms. Yet, in the 20 years we knew him, *not once* did we hear him complain. Sustained by Renée, his wife and foil of 57 years, and their accomplished son Roger, Traub's tireless wit prevailed at death's very door, as in an exchange overheard at the National Naval Medical Center, in Bethesda, Maryland. Asked by a Dr. Watson to describe his latest problem, Traub replied: "Alimentary, my dear Watson."

A week before Traub's death, we made a final pilgrimage to his bedside. We found him incoherent, already beyond reach of our farewells. Had he been able to understand us, what could we have said to this man, who all his adult life was contemptuous of his own feelings but ever empathetic with others? Since adolescence, one of us (RGR) has kept on his night table the thoughts of the Roman Emperor and Stoic philosopher Marcus Aurelius Antoninus (A.D. 121-180), as translated by the great John Jackson for Oxford University Press in 1906 and reprinted down to this day. Anticipating by more than a millennium the

Florentine triumph that gave us Robert Traub, Antoninus offers these words of parting (XII: 36): "Friend, thou hast been a citizen in this great city, and what matters it whether for five years or three? The law is the same for us all. Where is the hardship, then, if it be no tyrant's stroke, no unjust judge, that sends thee into exile, but the same Nature that brought thee hither, even as the master of the show dismisses the mummer that he put on the stage? . . . For He decrees it shall end, who was once the author of thy existence, and now of thy dissolution . . . Then depart in peace with all men, for He who bids thee go is at peace with thee."

Richard G. Robbins, *Armed Forces Pest Management Board, Walter Reed Army Medical Center, Forest Glen Section, Washington, DC 20307-5001, U.S.A.*; Ralph P. Eckerlin, *Division of Natural Sciences and Mathematics, Northern Virginia Community College, 8333 Little River Turnpike, Annandale, VA 22003-3796, U.S.A.*